

CHARLOTTE-MECKLENBURG UTILITIES

Good News About Your Water

2004 WATER QUALITY REPORT



Quality Standards

For the seventh consecutive year, Charlotte-Mecklenburg Utilities proudly unveils our Water Quality Report, demonstrating superior water quality results for our customers. Utilities employees are pleased to report exceptional performance in accord with all state and federal drinking water laws. This edition of the federally mandated Water Quality Report covers all testing completed from January through December 2004 and shows that Charlotte-Mecklenburg Utilities met and surpassed all standards set by any regulatory agency.

14 substances were detected in our water, from the more than 150 tested. None of the substances met or exceeded the limits. In fact, several substances detected in 2003 were not present in 2004. Providing reliable, clean drinking water is our mission. Safely treating and distributing over 38 billion gallons of water a year to the community is our charge. We remain vigilant in our role as environmental stewards for future water users.

This report reflects the hard work and dedication of Utilities employees who ensure your water meets all known standards for safety, reliability and quality. We hope you will take the time to read this important information about the quality of the water we treat and distribute to you everyday.



Quality Performance

The water distributed to our customers is treated, monitored and tested by state-certified operators. It is analyzed by our laboratory professionals to ensure compliance with quality standards. But water quality begins with the source. The surface waters of Lake Norman and Mountain Island Lake provide an outstanding resource for our community's water needs. Once treated and tested, Utilities safely transports over 100 million gallons of treated drinking water to our customers on an average day. Our three water treatment plants at Franklin Water Treatment Plant in northwest Charlotte, Vest Water Treatment Plant in central Charlotte, and North Mecklenburg Water Treatment Plant in Huntersville have a combined total treatment capacity of 242 million gallons per day.

Our commitment to exceptional water quality is reflected in the number of tests we perform during and after the treatment process. Over 150,000 analyses were conducted during 2004 to ensure reliable results and safe drinking water. This number is far greater than the required testing levels.

Quality Results

Many of the substances we are required to test for occur naturally in our environment. We list only the substances our lab detected along with the location of the treatment plant where the samples were taken. You can clearly see that Charlotte-Mecklenburg Utilities met all regulatory standards in 2004.

This chart contains the name of each contaminant, the unit of measurement, the location, our test result, the mandated goals and limits and the likely source of the contaminant. The units of measure vary by substance and are noted on the chart as either milligrams per liter (ppm) or micrograms per liter (ppb).



For a complete list of all tested substances, contact the City/County Customer Service and Information Center at 704-336-7600 or visit www.cmutilities.com.

Notice of Violation: The private lab contracted to analyze samples and report results to the State was late in submitting the required information. This error constitutes a reporting violation. When notified of the error, the results were submitted. This in no way posed a health threat to our customers.

Substances Found in Our Drinking Water in 2004

Contaminant	Your Water	Range Detected	MCLG (Goal)	MCL (Highest Allowed)	Likely Source
Microbial Substance Total Coliform (%)	0.31%	N/A (Annual average)	0	Present in no more	Naturally present than 5% of samples
in the environment		(Annual average)			than 5 % of Samples
Turbidity NTU Franklin Vest North Meck	0.19 NTU/100% 0.13 NTU/100% 0.12 NTU/100% (Annual average)	N/A	N/A	TT = 1 NTU TT = 95 % of samples below 0.3 NTU	Soil Runoff
Disinfection By-Pro					
Total Haloacetic Acids (p Franklin Vest North Meck Distribution		12-37	N/A	60 (running yearly average)	By product of drinking water chlorination
Total Trihalomethanes (p Franklin Vest North Meck Distribution	_	21-96	N/A	80 (running yearly average)	By product of drinking water chlorination
Inorganic Substances					
Asbestos (mf/L)	0.174 mf/L	N/A	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Barium (ppm) Franklin Vest North Meck	0.011 0.010 0.009	ND - 0.011 ND - 0.010 ND - 0.009	2	2	Discharge of drilling wastes and metal refineries; erosion of natural deposits
Copper (ppm) (90th percentile)	O mg/L (90th percentile) O sites above Action Level	N/A	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Flouride (ppm) Franklin Vest North Meck	1.0 mg/L 0.97 mg/L 0.98 mg/L (Annual average)	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth
Lead (ppb) (90th percentile)	O ug/l (90th percentile) O sites above Action Level	N/A	0	AL = 15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (ppm) Franklin Vest North Meck	0.22 mg/l 0.23 mg/l 0.20 mg/l	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits
Organic Substances					
Dalapon (ppm) Franklin Vest	0.0014 mg/L 0.0016 mg/L	ND - 0.0014 ND - 0.0016	.2	.2	Runoff from herbicide used on rights of way
Simazine (ppm) Franklin	0.00008 mg/L	ND - 0.00008	.004	.004	Herbicide runoff

Contaminant	Your Water	Range Detected	MCLG (Goal)	MCL (Highest Allowed)	Likely Source
Radiological Subst	ances				
Alpha (pCi/L)		N/A	0	15	Erosion of natural
Franklin	0.6 pCi/L				deposits
Vest North Meck	0.6 pCi/L				
Beta Emitters (pCi/L)	0.9 pCi/l				
Franklin	2.3 pCi/L	N/A	0	50	Decay of natural and
Vest	3.1 pCi/L	, .	· ·		man made deposits
North Meck	2.4 pCi/L				'
Radium 226 (pCi/L)		N/A	0	3	Erosion of natural
Franklin	0.2 pCi/L				deposits
Vest	0.1 pCi/L				
North Meck	0.2 pCi/l				
Radium 228 (pCi/L)	0.0.0'"	N/A	0	5	Erosion of natural
Franklin	0.3 pCi/L				deposits
Vest North Meck	0.3 pCi/L 0.6 pCi/L				
Uranium (pCi/L)	0.0 poi/L	N/A	0	20.1	Frosion of natural
Franklin	0.7 pCi/L	, .	· ·	20.1	deposits
Vest	0.4 pCi/L				
North Meck	0.2 pCi/I				

Glossary

Action Level (AL) – The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a system must follow.

Maximum Contaminant Level Goal (MCLG) – The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL) –The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology.

Non-Applicable (N/A) – Information not applicable or required.

 $\begin{tabular}{ll} \textbf{Non-Detects (N/D)} - laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used. \end{tabular}$

Picocuries per liter (pCi/L) – Picocuries per liter is a measure of radioactivity in water.

Parts per million (ppm) – One part per million (milligrams per liter) corresponds to one minute in two years, or a single penny in \$10,000.

Parts per billion (ppb) – One part per billion (micrograms per liter) corresponds to one minute in two thousand years, or one penny in \$10 million.

Nephelometric Turbidity Unit (ntu) – A measure of the cloudiness of the water. Turbidity over 5 ntu is just noticeable to the average person. It is a good indicator of the

effectiveness of our filtration system.

Turbidity % - Low levels are a goal for all substances except turbidity as a percentage. The turbidity rule requires that 95% or more of the monthly samples must be below 0.5 ntu.

Action Level (AL) -

The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a system must follow.



TT – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Million Fibers per Liter (MFL) - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Extra note: MCL's are set at very stringent levels. To understand the possible health effects for many regulated substances, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

What Is In Your Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some substances. The presence of these substances does not necessarily indicate that the water poses a health risk. All sources, both tap and bottled, are fed by water that passes over the surface of the land or under ground. The water dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in raw (untreated) water include:

Microbial – viruses and bacteria from human, agricultural or wildlife sources. Inorganic – salts and minerals naturally-occurring or result from urban runoff, industrial or domestic wastewater discharges, mining or farming. Pesticides and herbicides – may come from agricultural runoff or residential use. Organic chemicals – may come from industrial or domestic processes, oil and gas production, runoff and septic systems.

Radioactive materials – can be naturally occurring or the result of mining or human activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain substances in water provided by public systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Source Water Assessment Program

(The following information is provided by North Carolina Department of Environment and Natural Resources. If you have any questions about this information please call 919-715-2633.)

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source to potential contaminant sources. The results of the assessment are available in SWAP Assessment reports.

The relative susceptibility rating of each source for Charlotte-Mecklenburg Utilities was determined by combining the contaminant rating and the vulnerability rating or the existing conditions of the watershed. The assessment findings are summarized in the table below.

Source Name	Inherent Vulnerability Rating	Contaminant Rating	Susceptibility Rating	Date
Mt. Island/Catawba River	Moderate	Moderate	Moderate	November 2003
Lake Norman	Moderate	Higher	Higher	November 2003

It is important to understand that a susceptibility rating of higher <u>does not</u> imply poor water quality, only the systems' potential to become contaminated by potential contaminant sources in the assessment area.

The complete SWAP Assessment report for Charlotte-Mecklenburg may be viewed on the web at :

http://www.deh.enr.state.nc.us/pws/swap. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this site may differ from the results that were available at the time this CCR (Water Quality Report) was prepared. To obtain a printed copy send a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634 or email swap@ncmail.net.

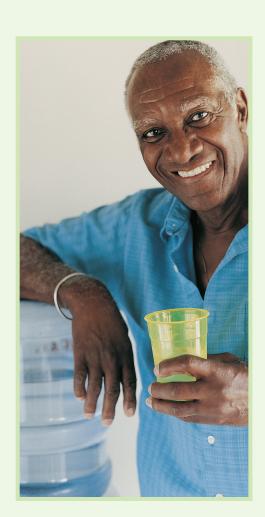


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Charlotte-Mecklenburg Utility Public Water System ID Number = 01-60-010

GET INVOLVED!

There are lots of ways to actively participate in water quality issues in this community. For more information, please call us at 704-399-2221 or check us out at our web site: www.cmutilities.com

Special Information For People With Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

Environmental Protection Agency (EPA) and Center for Disease Control (CDC) guidelines on appropriate means to reduce the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800-426-4791).

For Additional Water Quality Information:

Charlotte-Mecklenburg Utilities 5100 Brookshire Blvd. Charlotte, NC 28216 704-399-2221 www.cmutilities.com

For More Information About This Brochure:

Please contact the City/County Customer Service and Information Center at 704-336-7600 or call Maeneen Klein, Water Conservation Coordinator at 704-399-2221.

Translation

La información contenida en este folleto es de gran importancia. Por favor de hablar con una persona que la entienda o llame por teléfono al número 704-336-7600 para pedir una copia de este folleto en español.

Trong tập tài liệu chỉ dẫn này có nhiều điều quan trọng. Xin quí vị nhờ người thông dịch hay nhờ bạn bè dịch lại để có thể được hiểu rõ ràng.